

Title (en)

METHOD FOR COMBINING A PLURALITY OF EYE IMAGES INTO A PLENOPTIC MULTIFOCAL IMAGE

Title (de)

VERFAHREN ZUM KOMBINIEREN VON MEHREREN AUGENBILDERN IN EINER PLENOPTISCHEN BILDES MULTIFOKALE

Title (fr)

PROCÉDÉ PERMETTANT DE COMBINER UNE PLURALITÉ D'IMAGES DE L' IL EN UNE IMAGE MULTIFOCALÉ PLÉNOPTIQUE

Publication

**EP 2787877 A4 20150812 (EN)**

Application

**EP 12855019 A 20121208**

Priority

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- US 2012068646 W 20121208

Abstract (en)

[origin: WO2013086473A1] A method for combining a plurality of eye images into a plenoptic multifocal image that includes registering the eye images with a plurality of frames into one or more eye image sets with a processor and a memory system, aligning each of the eye images in each of the one or more image sets with a selected reference that resides on the memory system with the processor and determining one or more in-focus regions of the eye images by calculating one or more gradient images while ignoring noise and other imaging artifacts. The method also includes identifying the one or more in-focus regions with highest resolution from the one or more gradient images and selecting one or more corresponding in-focus intensities from the frames to combine into a plenoptic multifocal image with a higher resolution than the eye images, the frames and the one or more eye image sets.

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